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REMARKS

Claims 1-44 are now pending in the present application. The Office Action mailed January 16, 2002 (hereinafter "Office Action") rejected all of Claims 1-44. More specifically, the Office Action rejected Claims 6, 13, 29, and 36 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicants regard as being their invention. The Office Action rejected Claims 1-9, 14-20, 23-32, and 37-42 under 35 U.S.C. § 102(b). Although the Office Action stated that the § 102(b) rejection is based on a public use or sale of the invention, applicants assume that the Examiner intended the § 102(b) rejection to be based on anticipation in view of U.S. Patent No. 5,696,964 issued to Cox et al. (hereinafter "Cox"). The Office Action rejected Claims 21-22 and 43-44 under 35 U.S.C. § 103(a) as being unpatentable over Cox. The Office Action rejected Claims 10-12 and 33-35 under 35 U.S.C. § 103(a) as being unpatentable over Cox in view of U.S. Patent No. 5,893,095 issued to Jain et al. (hereinafter "Jain"). Additionally, the Office Action objected to the title of the invention as not being descriptive of the invention to which the claims are directed. The Office Action suggested amending the title of the invention to "Visual Thesaurus As Applied To Media Clip Searching." Applicants are amending the title of the invention as the Office Action suggests.

Applicants respectfully traverse the rejections of Claims 1-44 as set forth in the Office Action. Applicants are amending the Claims 1, 13, 16, 18, 24, 36, 38, and 40 to more particularly point out and distinctly claim the subject matter that applicants regard as being their invention. Applicants respectfully submit that, upon entry of this amendment, all pending Claims 1-44 are allowable. More specifically, with respect to the indefiniteness rejections of Claims 6 and 29, applicants respectfully submit that the scope of the limitation "artistic style" is clear and definite, since one of ordinary skill in the art would recognize that art is typically

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described in terms of the art's style. With respect to the indefiniteness rejections of Claims 13 and 36, applicants have amended Claims 13 and 36 for clarification purposes so that the term "keyword" does not refer to an earlier recitation and therefore does not lack antecedent basis. With respect to the anticipation and obviousness rejections, applicants respectfully submit that neither Cox nor Jain, either alone or in combination, teaches or suggests the subject matter recited in the rejected claims. Prior to discussing in detail why applicants believe that all of the claims in this application are allowable, a brief description of applicants' invention and brief descriptions of the teachings of Cox and Jain are provided. The following discussion of the disclosed embodiments of applicants' invention and the discussion of the differences among the disclosed embodiments and the teachings in the applied references are not provided to define the scope or interpretation of any of the claims. Instead, such discussed differences are provided to help the United States Patent and Trademark Office (hereinafter "the Office") to better appreciate important claim distinctions discussed thereafter.

Summary of the Present Invention

The present invention is directed to a method, system, and computer-readable medium for searching a media clip database associated with a multimedia application program. The media clip database includes information that describes each associated media clip in the media clip database. In response to a user selecting a media clip, information associated with the selected media clip is retrieved from the media clip database. The information associated with the selected media clip is presented and exposed to the user. The user can select search criteria based on the information associated with the selected media clip. In response to the user selecting search criteria based on the information associated with the selected media clip. In response to the user selecting search criteria based on the information associated with the selected media clip, all of the media clips in the media clip database that have associated information that matches the selected search criteria for the selected media clip are retrieved.

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In accordance with further aspects of this invention, the search criteria includes a list of keywords, which are characteristic words or attributes that are stored in the media clip database for use in searching the media clip database. In another aspect of this invention, one of the keywords designates the format of the clip, such as "mpeg," or "gif." In a further aspect of this invention, all of the keywords associated with the clip are displayed in a Find Similar Clips user interface. In yet another aspect of this invention, similar clips are located based on the keywords associated with the selected clip; that is, any clip in the clip catalogue having an associated keyword that matches at least one of the keywords of the selected clip is located.

In accordance with other aspects of this invention, the search criteria includes artistic style. If the user elects to locate similar clips based on artistic style, the clip catalogue is searched and a thumbnail sample of each of the clips in the clip catalogue having the same artistic style as the selected clip is displayed. Preferably, clips of all categories are displayed, with the category or categories of the selected clip being displayed first. In further aspects of this invention, "artistic style" is an optional keyword associated with a clip. Preferably, a user may not add to or modify the artistic style of a clip, i.e., the optional artistic style keyword associated with a clip is static.

In accordance with a still further aspect of this invention, clips similar to the selected clip are located based on the color and/or shape of the selected clip. In further aspects of this invention, keywords define the color and shape of an associated clip. In other aspects of this invention, mathematical representations define the color and shape of an associated clip. Preferably, if the user chooses to locate clips based on color and shape, a thumbnail sample of each of the clips having a similar color scheme and shape as the selected clip is displayed.

In accordance with yet still another aspect of this invention, a user interface that allows a user casy accessibility to other functions of the multimedia applications program including the

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clip catalogue is provided. Preferably, the other functions include inserting a chosen clip into a document, playing or previewing a chosen clip, and adding a chosen clip to a category. Preferably, the user interface minimizes obscuring of objects displayed on the screen, i.e., clip thumbnail sketches. It is also preferable that any user interface screens accessed (i.e., additional functions) also minimize display obstruction.

In accordance with a yet still further aspect of this invention, clips are sorted based on media type. Preferably, the media types include Clip Art/Pictures, Sounds, Videos, and Text. If the user requests a Clip Art/Pictures preview, an actual-size version of the clip is displayed. If the user requests a Sounds clip preview, audio is played. If the user requests a Videos clip preview, video is played. If the user requests a text clip preview, the full text is displayed. For example, if the text clip is a document, the document is displayed, and if the text clip is an annotation (e.g., handwritten note), the annotation is displayed. In accordance with yet a further aspect of this invention, clips are also sorted based on category. Categories include several predefined topics. Preferably, a user can add a clip to any desired category or categories.

As will be readily appreciated from the foregoing summary, the invention provides a search tool for searching a clip catalogue containing a plurality of multimedia clips and that allows a user to find a clip that the user will "know it when I see it." Selecting one or more desirable parameters of a selected clip allows a user to rapidly locate clips of like type being sought so that a final decision can be quickly reached regarding a clip to be used in, for example, a document being prepared. The present invention avoids the need to formulate complex, difficult queries.

Summary of the Cox Reference

The Cox reference is generally directed toward a multimedia database retrieval system that maintains a "posterior probability distribution" that each item in the database is a target of a

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Bayesian interface engine that refines its answer with each user response. The set of user responses includes a series of displays and user actions, and is defined by a relatively simple user interface. The system maintains a posterior probability distribution that each image in a multimedia database is the target of the search. This distribution is used to select the next images to display to the user and solicits selections from the user pertaining to images displayed. The user's selections are then incorporated into the posterior distribution via a probabilistic user model.

In summary, Cox discloses a queryless multimedia database retrieval method and system that maintain a posterior probability distribution for use in selecting the next images to display to the user. However, Cox does not disclose searching a media clip database that contains information describing each associated media clip in the media clip database. Cox also does not disclose that in response to a user selecting a media clip, information associated with the selected media clip is retrieved from the media clip database. Because Cox does not retrieve associated information from the database, Cox cannot present the associated information to the user. Additionally, Cox does not enable the user to select search criteria based on the information associated with the selected media clip. Furthermore, Cox does not provide that, in response to the user selecting search criteria based on the information associated with the selected media clip, all of the media clips in the media clip database that have associated information that matches the selected search criteria for the selected media clip are retrieved. Only the present invention teaches this subject matter.

Summary of the Jain Reference

The jain reference is generally directed toward a system and method for content-based search and retrieval of visual objects. A base visual information retrieval (VIR) engine utilizes a

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set of universal primitives to operate on the visual objects. An extensible VIR engine allows custom, modular primitives to be defined and registered. A custom primitive addresses domain-specific problems and can utilize any image-understanding technique. Object attributes can be extracted over the entire image or over only a portion of the object. A schema is defined as a specific collection of primitives. A specific schema implies a specific set of visual features to be processed and a corresponding feature vector to be used for content-based similarity scoring. A primitive registration interface registers custom primitives and facilitates storing of an analysis function and a comparison function in a schema table. A heterogeneous comparison allows objects analyzed by different schemas to be compared if at least one primitive is in common between the schemas. A threshold-based companison is utilized to improve performance of the VIR engine. A distance between two feature vectors is computed in any of the comparison processes so as to generate a similarity score. Jain also discloses an alphanumeric query input module that allows the user to specify a target object by alphanumeric attributes.

In summary, Jain discloses content-based searching and retrieving of visual objects using a base engine, having a set of universal primitives and an extensible engine having custom primitives. Jain also discloses an alphanumeric query input module for specifying a target using alphanumeric attributes. However, Jain does not disclose that, in response to a user selecting a media clip, information associated with the selected media clip is retrieved from the media clip database. Because Jain does not retrieve the associated information, Jain cannot present the associated information to the user. Additionally, Jain does not enable the user to select search criteria based on the retrieved and presented information associated with the selected media clip. Only the present invention retrieves and presents descriptive information that is associated with a selected media clip, which allows the user to select search criteria without having to formulate

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complex, difficult queries to retrieve all media clips in the media clip database that have associated information that matches the selected search criteria for the selected media clip.

Rejection of Claims 6, 13, 29, and 36 Under 35 U.S.C. § 112, Second Paragraph:

The Office Action rejected Claims 6, 13, 29, and 36 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicants regard as being their invention. With respect to dependent Claims 6 and 29, the Office Action states that the phrase "artistic style" is vague and indefinite. The Office Action states that an artistic style is a highly subjective phrase and it is unclear as to how this phrase can be quantified. With respect to Claims 13 and 36, the Office Action states that the limitation "the keywords" has insufficient antecedent basis. The Office Action states that the limitation "artistic style" is being interpreted as a style indicative of color or shape. The Office Action also states that the limitation "the keywords" is being interpreted as indicative of clip attributes.

With respect to dependent Claims 6 and 29, applicants respectfully submit that the limitation "artistic style" is clear and definite. One of ordinary skill in the art would know that art is usually described in terms of the art's style. For example, some artistic styles include portraits, abstract art, cubism art, expressionism, Fauvism, impressionism, pointillism, pop art, post-impressionism, primitivism, realism, surrealism, and art deco. In one embodiment of the present invention, the artistic style is a keyword and is stored in the clip database when the clip is added to the database. Therefore, applicants respectfully submit that the limitation "artistic style" particularly points out and distinctly claims subject matter that applicants regard as being their invention. Thus, applicants respectfully submit that Claims 6 and 29 are clear and definite and allowable.

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With respect to dependent Claims 13 and 36, applicants respectfully submit that, upon entry of this amendment, all limitations recited in Claims 13 and 36 will have sufficient antecedent basis. More specifically, Claims 13 and 36 have been amended to recite that the search criteria includes "a list of keywords" that are associated with the selected media clip. Applicants also respectfully submit that the limitation "keywords" is clear and definite. A keyword is a characteristic word or attribute that is stored in the media clip database for use in searching the media clip database. Applicants respectfully submit that the term "keyword" is well known by those of ordinary skill in the art at the time the invention was made. Therefore, applicants respectfully submit that Claims 13 and 36 particularly point out and distinctly claim subject matter that applicants regard as being their invention and that all limitations recited in Claims 13 and 36 have sufficient antecedent basis. Thus, applicants respectfully submit that Claims 13 and 36 are allowable.

Rejection of Claims 1-9, 14-20, 23-32, and 36-42 Under 35 U.S.C. § 102(b):

The Office Action rejected Claims 1-9, 14-20, 23-32, and 37-42 under 35 U.S.C. § 102(b). Applicants assume that the Office Action intended the § 102(b) rejection to be under grounds of anticipation by Cox, and not a public use or sale of the invention as stated in the Office Action. With respect to Claim 1, the Office Action states that Cox discloses a Pic Hunter media searching tool having a GUI interface that displays four images from a clip database. After the user selects an image and presses a "GO" button, Cox displays a second set of four images similar to the initially selected image. The Office Action states that Cox's invention analyzes a user-selected image to retrieve and present a similar set of images. The Office Action also states that, in choosing an image, the image attributes, such as the color and shape, are inherent within said image and are used as search criteria by the system of Cox. Applicants

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respectfully disagree with the rejection of Claims 1-9, 14-20, 23-32, and 37-42 for the reasons discussed below.

Applicants have amended Claim 1 to more particularly point out and distinctly claim the subject matter that applicants regard as being their invention. In its present form, Claim 1 recites as follows:

(Amended) A method for searching a media clip database associated with a multimedia application program, wherein said media clip database contains information that describes each associated media clip in said media clip database, comprising:

in response to a user selecting a media clip, retrieving information

presenting said information associated with said selected media clip; and in response to the user selecting a search criteria based on said information associated with said selected media clip, retrieving all media clips in said media clip database that have associated information that matches the selected search criteria for the selected media clip.

As recited above, Claim 1 provides a "method for searching a media clip database" that enables the user to select a media clip and "retrieve information associated with said selected media clip from said media clip database". The method of Claim 1 presents "said information associated with said selected media clip" to the user and allows the user to "select search criteria based on said information associated with said selected media clip" to retrieve "all media clips in said media clip database that have associated information that matches the selected search criteria for the selected media clip". Thus, the method of Claim 1 allows the user to search a media clip database by exposing descriptive information associated with a selected clip, which can be utilized to select search criteria without having to formulate difficult, complex queries.

Several significant advantages are provided by the method of Claim 1. Many users need assistance in searching a media clip database because they don't know what terms to use when formulating queries. This may be due to the user's lack of experience in formulating queries. However, even experienced users are often unsure of which terms to use in formulating queries

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for a media clip because media clips, such as images, are difficult to describe in words. Thus, the method of Claim 1 provides a novel method of searching a media clip database by selecting a media clip and retrieving descriptive information associated with a selected media clip for selecting search criteria without having to formulate difficult, complex queries.

Applicants respectfully submit that Cox fails to teach or suggest that, "in response to a user selecting a media clip, retrieving information associated with said selected media clip from said media clip database," as recited in Claim 1. Cox fails to disclose a media clip database that contains information that describes an associated media clip. Therefore, Cox cannot teach or suggest "retrieving information associated with said selected media clip from said media clip database". Additionally, Cox is limited to disclosing that, in response to the user selecting an image, a probability distribution is recomputed and four images with the highest probability ranking are displayed. Recomputing the probability distribution as a result of the user selecting a media clip is not the same as "retrieving associated information with said selected clip". Thus, Cox fails to teach or suggest "in response to a user selecting a media clip, retrieving information associated with said selected media clip from said media clip database. Only applicants' invention as recited in Claim I provides this subject matter.

Similarly, applicants respectfully submit that Cox fails to teach or suggest "presenting said information associated with said selected media clip," as recited in Claim 1. By presenting information associated with the selected media clip, the method of Claim 1 exposes to the user descriptive information associated with a selected clip from which the user can select the search criteria to find all clips with matching associated information. Cox fails to disclose searching a database containing information that describes an associated media clip. Therefore, Cox cannot teach or suggest "presenting information associated with said selected media clip" from the media clip database. Moreover, Cox is limited to disclosing a simple user interface that displays

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a set of four images, which could be enhanced with the addition of richer controls to indicate whether an image resembles the target's color or shape. The enhanced user interface of Cox still fails to teach or suggest "presenting information associated with said selected media clip," because providing a button to indicate that an image resembles the target's color does not provide any descriptive information associated with an image. Only applicants' inventor as recited in

Claim I provides for "presenting information associated with said selected media clip".

Additionally, applicants respectfully submit that Cox fails to teach or suggest "in response to the user selecting a search criteria hased on information associated with the selected clip, retrieving all media clips in said media clip database that have associated information that matches the selected search criteria for the selected media clip." Cox fails to allow the user to select a search criteria based on information associated with the selected clip. Rather, the user of the Cox invertion is limited to search criteria based on a computed probability distribution. Cox also fails to allow the user to retrieve "all media clips in said media clip database that have associated information that matches the selected search criteria for the selected media clip." Rather, Cox is limited to retrieving images with the highest computed probability ranking, which is not the same as retrieving images "that have associated information that matches the selected search criteria". Only applicants' invention as recited in Claim 1 provides "in response to the user selecting a search criteria based on information associated with the selected clip, retrieving all media clips in a media clip database that have associated information that matches the selected search criteria for the selected media clip."

Therefore, applicants respectfully submit that Cox fails to teach any of the subject matter recited in Claim 1. Thus, applicants respectfully submit that Claim 1 is allowable and request the withdrawal of the § 102(b) rejection.

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Claims 2-9 and 14 directly or indirectly depend from Claim 1. Therefore, the analysis discussed above with respect to Claim 1 also applies to Claims 2-9 and 14. Thus, applicants respectfully submit that Claims 2-9 and 14 are allowable for at least the same reasons as Claim 1. Additionally, Claims 2-9 and 14 recite further subject matter that is not taught or suggested by Cox. Applicants respectfully submit that Claims 2-9 and 14 are allowable for this reason in addition to those discussed above with respect to Claim 1.

Claim 15 recites a computer-readable medium having computer-executable instructions for performing the method recited in any one of Claims 1-14. Therefore, the analysis discussed above with respect to Claims 1-14 also applies to Claim 15. Thus, applicants respectfully submit that Claim 15 is allowable for the same reasons as Claims 1-14.

Applicants have amended Claim 16 similar to Claim 1. In it's present form Claim 16 recites a method for providing "a user interface for a visual thesaurus for a media clip database associated with a multimedia application program, wherein said media clip database contains information that describes each associated media clip in said media clip database." The method of Claim 16 recites "in response to the user selecting a media clip from said media clip database, displaying to the user an option for finding similar media clips that have associated information that matches the associated information for the selected clip." As discussed above with respect to Claim 1, Cox fails to teach or suggest scarching a media clip database that includes information associated with each media clip in the media clip database and wherein said information describes the associated media clip. Cox also fails to teach or suggest providing the user with an option for finding similar media clips "that have associated information that matches the associated information for the selected clip." Rather, Cox is limited to disclosing searching for and finding images based on a computed probability distribution that the image is the target of a search. It is not the same to search for clips, or images based on a probability

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distribution, as opposed to whether or not the clip has associated information that matches selected search criteria. Therefore, applicants respectfully submit that Cox fails to teach or suggest the method of Claim 16. Thus, applicants respectfully submit that Claim 16 is allowable.

Claims 17-20 directly or indirectly depend from Claim 16. Therefore, the analysis discussed above with respect to Claim 16 also applies to Claims 17-20. Thus, applicants respectfully submit that Claims 17-20 are allowable for at least the same reasons discussed above with respect to Claim 16. Additionally, Claims 17-20 recite further subject matter not taught or suggested by Cox and are allowable for this additional reason as well.

Claim 23 recites a computer-readable medium having computer-executable instructions for performing the method recited in any one of Claims 16-22. Therefore, applicants respectfully submit that the analysis discussed above with respect to Claims 16-22 also applies to Claim 23. Thus, applicants respectfully submit that Claim 23 is allowable for the same reasons as Claims 16-22.

Applicants have amended Claim 24 similar to Claim 1. In it's present form, Claim 24 recites an apparatus that parallels the method of Claim 1. Therefore, applicants respectfully submit that the analysis discussed above with respect to Claim 1 also applies to Claim 24. Thus, applicants respectfully submit that Claim 24 is allowable for the same reasons as Claim 1.

Claims 25-32 directly or indirectly depend from Claim 24. Therefore, the analysis discussed above with respect to Claim 24 also applies to Claims 25-32. Thus, applicants respectfully submit that Claims 25-32 are allowable for the same reasons as Claim 24.

Claims 36-37 depend from Claim 24. Therefore, the analysis discussed above with respect to Claim 24 also applies to Claims 36-37. Thus, applicants respectfully submit that Claims 36-37 are allowable for the same reasons discussed above with respect to Claim 24.

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Claim 38 recites an apparatus that parallels the method of Claim 16. Therefore, the analysis discussed above with respect to Claim 16 also applies to Claim 38. Thus, applicants respectfully submit that Claim 38 is allowable for the same reasons as Claim 16.

Claims 39-42 directly or indirectly depend from Claim 38. Therefore, the analysis discussed above with respect to Claim 38 also applies to Claims 39-42. Thus, applicants respectfully submit that Claims 39-42 are allowable for at least the same reasons discussed above with respect to Claim 38.

Rejection of Claims 21-22, 43, and 44 Under 35 U.S.C. § 103(a):

The Office Action rejected Claims 21-22 and 43-44 under 35 U.S.C. § 103(a) as being unpatentable over Cox. With respect to dependent Claim 21, the Office Action acknowledges that Cox fails to teach image previewing. However, the Office Action states that Cox suggests previewing images because Cox teaches a search interface of multiple clip images, with each image viewed and judged by a user until the user presses "found" to indicate that the target image has been found. The Office Action states that it would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Cox, to provide image previewing, which provides the advantage of allowing a user to visualize groups of candidate images at once for more precise selection.

Claim 21 depends from Claim 16. Therefore, the analysis discussed above with respect to Claim 16 also applies to Claim 21. Thus, applicants respectfully submit that Claim 21 is allowable for at least the same reasons as Claim 16. Additionally, Claim 21 recites further subject matter not taught or suggested by Cox. Applicants agree with the Office Action in that Cox fails to teach or suggest previewing an image. More specifically, Claim 21 further recites displaying to the user an option for previewing the selected clip. Only applicants' claimed invention provides a preview function that causes a more comprehensive viewing of the clip. If

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the clip is a picture clip, an actual-size version of the picture is shown on the display. If the clip is an audio clip, the audio is played. If the clip is a video clip, the video clip is shown on the display. If the clip is a text clip, the text is shown on the display. In contrast to the present invention, Cox is limited to teaching and suggesting a user interface that is intentionally kept as simple as possible and is designed to display four images on the screen for presentation to a user. All that Cox discloses is that the user can select one or more of the displayed images using the mouse. Simply because Cox discloses viewing four images on the screen does not teach or suggest previewing the selected clip to enable a more comprehensive viewing of the clip. Cox fails to suggest any function that the user may invoke to cause a more comprehensive view of the clip or image. Therefore, applicants respectfully submit that Claim 21 is allowable for this reason in addition to those discussed above with respect to Claim 16.

With respect to dependent Claim 22, the Office Action acknowledges that Cox fails to teach an option to add a clip to a category. However, the Office Action asserts that Cox suggests independent categorization of clip images by a user because Cox teaches that a user can indicate whether an image resembles a target's color, texture, etc. The Office Action states that it would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Cox, to add a clip to a category because it would provide the user with more freedom of control for more customized categorizations.

Claim 22 depends from Claim 16. Therefore, the analysis discussed above with respect to Claim 16 also applies to Claim 22. Thus, applicants respectfully submit that Claim 22 is allowable for at least the same reasons as Claim 16. Additionally, Claim 22 recites further subject matter not taught or suggested by Cox. More specifically, Claim 22 further recites "displaying to the user an option to add the clip to one or more categories." Applicants agree with the Office Action in that Cox fails to teach or suggest displaying to the user an option to add

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the clip to one or more categories. Applicants also agree with the Office Action in that displaying to the user an option to add the clip to one or more categories is an advantageous feature of applicants' invention. However, it is only applicants' claimed invention that teaches and suggests this advantageous feature. Only applicants' invention enables the user to invoke an "add category," function that causes an "add category" user interface to be displayed. The "add category" user interface provides a mechanism for the user to add the selected clips to any of the existing categories, including a "favorites" category. Only applicants' invention allows the user to search for isimilar clips and add selected clips to an existing category. In contrast, Cox is limited to teaching and suggesting a simple user interface that can be enhanced so that the user can indicate whether an image resembles a target's color, shape, texture, or composition. Indicating whiether an image resembles a target's color, shape, texture, or composition fails to teach or suggest adding an image to a category. Thus, Cox suggests that the user may indicate whether an image resembles a target's shape, texture, or composition for purposes of searching for similar images but fails to teach or suggest that the user may add the image to a category. Searching for an image is not the same as adding an image to a category. Only applicants' invention as recited in Claim 22 allows the user to search for similar images and organize images by adding the image "to one or more categories." Therefore, applicants respectfully submit that Claim 22 is allowable for this reason in addition to those discussed above with respect to Claim 16.

The Office Action rejected dependent Claims 43 and 44 along the same rationale as the rejection of Claims 21-22. Claims 43 and 44 recite an apparatus that parallels the methods of Claims 21 and 22. Therefore, the analysis discussed above with respect to Claims 21 and 22 also applies to Claims 43 and 44. Thus, applicants respectfully submit that Claims 43 and 44 are allowable for the same reasons as Claims 21 and 22.

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Rejection of Claims 10-12 and 33-35 Under 35 U.S.C. § 103(a):

The Office Action rejected Claims 10-12 and 33-35 under 35 U.S.C. § 103(a) as being unpatentable over Cox in further view of Jain. With respect to dependent Claims 10-12, the Office Action acknowledges that Cox fails to teach or suggest keywords as a search criteria. However, the Office Action asserts that Jain teaches content-based search and retrieval comprising image analysis, along with a query window comprising a set of keywords, such as a single keyword (i.e., "trekking"), and a keyword indicating a file name (i.e., himasky.gif). The Office Action states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the keyword query of Jain to the search criteria of Cox, allowing a user of Cox greater latitude in choosing search criteria.

Claims 10-12 directly or indirectly depend from Claim 1. Therefore, the analysis discussed above with respect to Claim 1 also applies to Claims 10-12. Thus, applicants respectfully submit that Claims 10-12 are allowable for at least the same reasons discussed above with respect to Claim 1. Additionally, Claims 10-12 recite further subject matter that is not taught or suggested by Cox or Jain, either alone or in combination. For example, Claim 11 further recites that "the keyword is selected from a list of keywords." Only applicants' invention provides the user with a presentation of a list of keywords associated with the selected clip and that are retrieved from the media clip database. This unique feature of applicants' invention addresses the problem that occurs when a user is not be skilled in formulating complex queries and needs assistance in selecting keywords for searching for images. Additionally, this unique feature of applicants' invention is helpful even for skilled users that do not know what search terms to apply because graphics and sounds are difficult to describe in words. As a result, applicants provide a suitable search tool that is able to accommodate a user who does not know exactly what he or she is looking for, but will "know it when I see it." Applicants' invention

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enables the user to advantageously select search criteria from a list of keywords that are associated with the selected clip. In this way, the user who does not know which terms to use to search for a similar clip is provided with the associated terms or keywords that can be used to find similar clips.

In contrast to the present invention as recited in Claims 10-12, Jain is limited to disclosing a conventional query, which does not solve the problems of users who are not skilled at formulating complex queries or even skilled users who do not know what search terms to apply because graphics and sounds are difficult to describe in words. Again, Jain is limited to disclosing a query window including a dialog box for keywords that the user can enter in to formulate a query for searching for images. Jain is generally formsed on providing a visual information retrieval engine for retrieving images based on visual queries. A visual feature is any property of an image that can be computed using computer vision and image processing techniques such as hue, saturation, and intensity histograms. Jain also discloses that the visual information retrieval system also supports standard textual attributes as do all standard databases. Thus, Jain is limited to disclosing conventional or standard textual database queries. Jain fails to teach or suggest presenting the user with search criteria that includes "a list of keywords" that are associated with the selected clip so as to enable the user to select search criteria for finding similar clips that have associated information that matches the selected search criteria. Therefore, applicants respectfully submit that neither Cox nor Jain, either alone or in combination, teaches or suggests the additional subject matter recited by dependent Claims 10-12. Thus, applicants respectfully submit that Claims 10-12 are allowable for these reasons in addition to those discussed above with respect to Claim 1.

The Office Action rejects dependent Claims 33-35 with the same rationale as the rejection of Claims 10-12. Claims 33-35 recite an apparatus that parallels the methods recited in

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Claims 10-12. Therefore, the analysis discussed above with respect to Claims 10-12 also applies to Claims 33-85. Thus, applicants respectfully submit that Claims 33-35 are allowable for the same reasons as Claims 10-12.

CONCLUSION

In view of the foregoing, applicants respectfully submit that all of the claims in the present application are in condition for allowance. Reconsideration and reexamination of the application are requested; allowance of the rejected claims and passage of the application to issue at an early date are solicited. If the Examiner has any questions or comments concerning this application, the Examiner is invited to contact the applicants' undersigned attorney at the number set forth below.

Respectfully submitted,

CHRISTENSEN O'CONNOR JOHNSON KINDNESSPLC

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I hereby certify that this correspondence is being transmitted via facsimile to: United States Patent and Trademark Office, Group Art Unit 2176, Examiner William L. Bashore, at facsimile number. 703.746.7239, on April 15, 2003

Date

4/15/02

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VERSION WITH MARKINGS TO SHOW CHANGES MADE APRIL 15, 2002

In the Title:

The title has been amended as follows:

VISUAL THESAURUS AS APPLIED TO MEDIA CLIP SEARCHING

In the Claims:

The Claims have been amended as follows:

1. (Amended) A method for scarching a [plwality of]media clip[s] database associated with a multimedia application program, wherein said media clip database contains information that describes each associated media clip in said media clip database, comprising[,]:

in response to a user selecting a media clip, retrieving information associated with said selected media clip from said media clip database:

presenting said information associated with said selected media clip: and

in response to the user selecting a search criteria based on said information associated with said selected media clip, retrieving all media clips in [a] said media clip database that have associated information that [match] matches the selected search criteria for the selected media clip.

- 13. (Amended) The method of Claim 1, wherein the search criteria <u>includes</u> [is all of the] a list of keywords that are associated with the selected <u>media</u> clip.
- 16. (Amended) A method for providing a user interface for a visual thesaurus for a media clip database associated with a multimedia application program, wherein said media clip database contains information that describes each associated media clip in said media clip database, comprising[,]:

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in response to a user selecting a media clip from said media clip database, displaying to the user an ortion for finding similar media clips [similar to] that have associated information that matches the associated information for the selected clip.

- 18. (Amended) The method of Claim 16, further comprising, in response to a user selecting the option for finding similar clips, displaying means for the user to select search criteria for finding similar clips, wherein said search criteria is based on information associated with said selected clip.
 - 24. (Amended) An apparatus for searching a plurality of media clips, comprising:
 - (a) a processing unit; and
- (b) a storage medium coupled to the processing unit, the storage medium storing program code implemented by the processing unit for:
- (i) providing an interface for a user to select a media clip from a media clip database associated with a multimedia application program, wherein said media clip database contains information that describes each associated media clip in said media clip database;
- (ii) providing an interface for the user to select [a] search criteria based on information associated with said selected media clip; and
- (iii) in response to the user selecting the media clip and the search criteria, retrieving all media clips in [a] the media clip database that have associated information that [match] matches the selected search criteria for the selected media clip.
- 36. (Amended) The apparatus of Claim 24, wherein the search criteria information includes [is all of the] a list of keywords that are associated with the selected media clip.

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- 38. (Amended) An apparatus for providing a user interface for a visual thesaurus for a media clip database associated with a multimedia application program, wherein the media clip database contains information that describes each associated media clip in said media clip database, comprising:
 - (a) a processing unit; and
- (b) a storage medium coupled to the processing unit, the storage medium storing program code implemented by the processing unit for displaying to a user an option for finding similar media clips [similar to] that have associated information that matches the associated information for a selected media clip, in response to the user selecting the media clip.
- 40. (Amended) The apparatus of Claim 38, wherein the program code displays means for a user to select search criteria based on information associated with said selected clip for finding similar clips, in response to the user selecting the option for finding similar clips.

The title has been amended as follows:

VISUAL THESAURUS AS APPLIED TO MEDIA CLIP SEARCHING

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In the Abstract:

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